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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,251	09/28/2004	Norbert Grass	32860-000786/US	1342

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EXAMINER	
SUGLO, JANET L	

ART UNIT	PAPER NUMBER
2857	

MAIL DATE	DELIVERY MODE
02/22/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/509,251	GRASS, NORBERT	
	Examiner	Art Unit	
	JANET L. SUGLO	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 January 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-6,8-27,29 and 30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6,8-27,29 and 30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *28 September 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 28, 2008 has been entered.

Response to Amendment

2. The action is responsive to the Amendment filed on January 28, 2008. Claims 1-6, 8-27, 29 and 30 are pending. Claims 11 and 24 have been amended. Claims 29 and 30 are new. Claims 7 and 28 have been cancelled.

3. Amendments filed January 28, 2008 overcome the objections to claims 11 and 24.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. **Claims 1, 3-6, 8-21, 23-27, and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al. (WO 99/60487) (hereinafter "Frank") in view of Dönig et al. (US Patent 5,471,377) (hereinafter "Dönig").

With respect to **claim 1**, Frank teaches a PC arrangement for visualization, diagnosis and expert systems for monitoring and controlling (e.g., page 6, lines 13-26) a variety of systems, comprising:

a server PC linked via a first network to the units (e.g., Figures 1 and 4-6); and

client PCs forming a second network with the server PC and connected to the first network for at least one of data transmission and data exchange with the systems via the server PC (Figures 1 and 4-6), wherein

software structure for the PC arrangement is broken down into autonomous software modules which each realize at least one functionality (e.g., Page 2, lines 2-5),

wherein one of the software modules is an autonomous server software module which realizes the at least one of data transmission and data exchange with the units and is implemented on the server PC connected to the units via the first network (e.g., page 17, lines 12-15; page 18, lines 13-27; page 19, lines 13-17);

wherein at least another of the software modules are implementable on at least one of a client PC and the server PC (e.g., page 17, lines 12-15; page 18, lines 13-27; page 19, lines 13-17),

wherein the server software module is used to categorize a large number of data from controllers of the units differently (e.g., page 15, ln 19-30),

wherein imaging of the measured and status data from the controllers in the server software module is cyclically updatable (e.g., page 16, ln 22-30), and

wherein other data is transmittable at the request of one of the client PCs (Frank: e.g., page 15, lines 19-30; page 16, lines 1-30).

Frank does not specify tat the variety of systems includes high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claims 3, 4, 21 and 23**, Frank further teaches connecting the server with the variety of systems using an Ethernet network using TCP/IP (which is a standard network) (Frank: e.g., page 7, line 20; page 19, line 15). Frank does not specify that the variety of systems includes high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control

method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 5**, Frank further teaches the server software module implemented on the server PC is a DCOM server (Frank: e.g., page 4, lines 1-20; page 12, lines 25-30).

With respect to **claim 6**, Frank further teaches a group of the various systems has an associated bus coupler (Frank: e.g., Figure 6). Frank does not specify that the variety of systems includes high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claims 8 and 24**, Frank further teaches a connection between the server PC, which implements the server software module and the controllers is automatically startable when data from the controllers is requested at one or more client PCs (Frank: e.g., page 13, lines 21-24; page 20, lines 12-21). Frank does not specify that the variety of systems includes high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g.,

col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 9**, Frank further teaches an autonomous measured data software module archives the measured data (Frank: e.g., page 9, lines 20-28; page 10, lines 1-7).

With respect to **claim 10**, Frank further teaches the measured data software module is at least one of a databank and data system in which measured and status data are archived for a period of time (Frank: e.g., page 16, lines 22-30).

With respect to **claim 11**, Frank further teaches an autonomous display software module displays data, sets at least one parameter, and controls units (Frank: e.g., page 17, lines 20-26). Frank does not specify that the units include high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claims 12 and 19**, Frank further teaches by use of the display software module, data stored in the measured data software module is accessible, measured and status data updated in the server software module is accessible and, by use of the server software module, further data available in the controllers is directly accessible (Frank: e.g., page 17, lines 20-26).

With respect to **claims 13 and 25**, Frank further teaches that the display software module is implementable on at least two client PCs and the server PC simultaneously (Frank: e.g., page 11, lines 1-4; Figure 4).

With respect to **claims 14, 26, and 27**, Frank further teaches that the display software module is configured to provide different monitoring and intervention measures to persons having different levels of authority (Frank: e.g., page 10, lines 10-30).

With respect to **claim 15**, Frank further teaches an autonomous control software controls auxiliary drives of devices (Frank: e.g., page 1, lines 14-19; page 2, lines 2-5). Frank does not specify that the devices include high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 16**, Frank further teaches the control software module is adapted to match components of the devices, automatically, to different operating conditions of the machines (Frank: e.g., page 14, lines 15-26). Frank does not specify that the machines include electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 17**, Frank further teaches an autonomous optimization software module optimizes operation of the machines (Frank: e.g., page 2, lines 10-12). Frank does not specify that the machines include high-voltage supply units for electrostatic filters. Dönig teaches controlling high-voltage supply units for electrostatic filters (Dönig: e.g., col 1, ln 11-15). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 18**, Frank teaches constant updating of the various machines (Frank: e.g., page 4, lines 29-30), but does not specify optimizing the operation of the electrostatic filter. Dönig teaches redefining and adapting setpoint values to enable optimal (i.e., efficient) operation (Dönig: e.g., col 1, ln 45-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

With respect to **claim 20**, Frank further teaches that the transmission and data exchange, via the server software module, is both cyclic and event-controllable (Frank: e.g., page 7, lines 8-11, page 16, lines 22-30).

With respect to **claim 30**, Frank teaches all limitations of parent claim 1, but does not teach the other data further includes parameter data and characteristic data associated with the at least one of the high-voltage supply units for electrostatic filters. Dönig teaches the other data further includes parameter data and characteristic data associated with the at least one of the high-voltage supply units for electrostatic filters (Dönig: e.g., col 3, ln 24-55). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Frank to include controlling

high-voltage supply units for electrostatic filters as done by Dönig because this control method enables optimal operation, create economic efficiency, and reduce personnel costs (Dönig: e.g., col 1, ln 45-50 and 59-63).

6. **Claims 2 and 22** are rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al. (WO 99/60487) (hereinafter "Frank"), in view of Dönig et al. (US Patent 5,471,377) (hereinafter "Dönig"), and further in view of Krivoshein (US Patent 6,449,715).

With respect to **claim 2**, Frank and Dönig teach parent claim 1, but do not specify that the network used is Profibus network. Krivoshein teaches using a Profibus network to connect devices (Krivoshein: e.g., col 1, ln 6-13). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teaches of Frank and Dönig to include the Profibus network as used by Krivoshein because the Profibus network allows smart field devices made by different manufacturers to be used together within the same process control network (Krivoshein: e.g., col 2, ln 2-6).

With respect to **claim 22**, Frank further teaches connecting the server with the client PCs using an Ethernet network using TCP/IP (Frank: e.g., page 7, line 20; page 19, line 15).

7. **Claim 29** is rejected under 35 U.S.C. 103(a) as being unpatentable over Frank et al. (WO 99/60487) (hereinafter "Frank"), in view of Dönig et al. (US Patent 5,471,377) (hereinafter "Dönig"), and further in view of Bragin et al. (US PGPub 2002/0021731) (hereinafter "Bragin"). Frank and Dönig teach parent claim 1, but do not teach the other data includes oscilloscope data associated with at least one of the high-voltage supply units for electrostatic filters. Dönig teaches recording characteristic filter curves which could be seen as oscilloscope data, but does not explicitly state oscilloscope data. Bragin teaches monitoring high voltage supply units for electrostatic filters using oscilloscopes (Bragin: [0054]). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Frank and Dönig to include the oscilloscope readings of Bragin because the oscilloscope gives precise measurements on power signals resulting in a more accurate control and monitoring system.

Response to Arguments

8. Applicant's arguments filed January 28, 2008 have been fully considered but they are not persuasive.

Applicant argues that the processor used in Frank would not be used in the cement and/or steel industry and therefor could not be combined with Dönig; however, Applicant's arguments are not well taken. Initially it is noted that the claims do not

require that the electrostatic filters are used in the cement and/or steel industry. Further even if the electrostatic filters are primarily used in the cement and/or steel industry, Dönig never states that his electrostatic filters are used in the cement and/or steel industry, and would therefore not require the processor suggested by applicant. Even if Frank discloses a system that would have a higher risk of malfunctions that does not mean that it would necessarily have more malfunctions nor have the allegations set forth by Applicant been supported by evidence. Frank in combination with Dönig anticipate all limitations of claims 1, 3-6, 8-21, and 23-27 as described above.

Applicant argues that the system of Frank requires several 100 milliseconds for access times which is unsuitable for the control and regulation of an electrostatic filter; however, Applicant's arguments are not well taken. Examiner asserts that while Applicant argues that Frank and Dönig could not be combined because electrostatic filters require 10-25 milliseconds which is faster than the 100 ms access times of Frank, no support or evidence has been provided to support this assertion. Further Examiner is not persuaded that Frank cannot respond at the 25 millisecond rate as the last paragraph of page 16 of Frank states that five different execution frequencies may be specified and may be *adjusted* by 100 milliseconds. Although the adjustment is done in 100 milliseconds this does not exclude initial frequencies of near 25 milliseconds.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., electrostatic filters in the cement and/or steel industry) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JANET L. SUGLO whose telephone number is (571)272-8584. The examiner can normally be reached on Mon, Wed, Thur, Fri from 6:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on 571-272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/JANET L SUGLO/
Examiner, Art Unit 2857

/Eliseo Ramos-Feliciano/
Supervisory Patent Examiner, Art Unit 2857